

Cognition Therapeutics Publishes Biomarker Findings from Clinical Study of CT1812 Supporting Positive Impact on Synapse Biology

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New York, February 9, 2021 — [Cognition Therapeutics, Inc.](#), a clinical stage neuroscience company developing drugs that treat neurodegenerative disorders by regulating cellular damage response pathways, today announced that a peer-reviewed manuscript entitled, “Preclinical and clinical biomarker studies of CT1812: a novel approach to Alzheimer’s disease modification” has been published in *Alzheimer’s & Dementia: The Journal of the Alzheimer’s Association* (doi.org/10.1002/alz.12302).

This publication summarizes the fundamental preclinical in vivo and in vitro evidence that CT1812, Cognition Therapeutics’ lead candidate for the treatment of Alzheimer’s disease, blocks amyloid beta (A β) oligomers from binding to their target receptor on synapses, thus preventing the loss of synapses and other deleterious downstream effects. Indeed, in an aged transgenic mouse model of Alzheimer’s disease, treatment with CT1812 vs vehicle (control) significantly improved spatial learning and memory as measured by several commonly used assessments. CT1812-treated mice performed approximately to the level of wild-type mice. By preventing the binding of A β oligomers, CT1812 mimics the protective effect of the AT673 “Icelandic” mutation, which causes a profound reduction in A β oligomer binding affinity in carriers ([doi:10.1111/jnc.15212](https://doi.org/10.1111/jnc.15212)).

Based on these encouraging preclinical findings, CT1812 was advanced through first-in-human Phase 1 studies and into a Phase 1b/2 trial (COG0102) in 19 patients with mild-to-moderate Alzheimer’s disease (MMSE scores of 18-26). While treatment duration (28 days) was not sufficient to record changes in cognition, it was observed that concentrations of synaptic proteins, neurogranin and synaptotagmin-1, decreased in individuals treated with CT1812 and were unchanged in patients receiving placebo, supporting the proposed mechanism of action.

Analysis of proteins collected from the cerebrospinal fluid (CSF) of study participants who received [CT1812](#) or placebo identified 315 proteins that were significantly different between the two groups. Fourteen of these proteins are directly involved in synapse function, such as dendritic branching and neurotransmission; and 20 are involved in biological pathways known to be disrupted in Alzheimer’s disease, such as lipid transport, oxidative stress, complement and synaptic transmission.

“The early clinical results combined with the highly encouraging proteomics findings provide strong evidence that treatment with CT1812 improves disease-related biology in patients with Alzheimer’s disease,” explained [Susan Catalano, Ph.D.](#), Cognition’s founder and chief science officer. “We are currently undertaking Phase 2 clinical pharmacology studies that will hone our understanding of the impact of CT1812 on synapse biology as well as a larger Phase 2 study that is assessing the safety and efficacy of longer-term (6-month) treatment with CT1812 in up-to 120 patients with mild-to-moderate Alzheimer’s disease.”

“This publication provides important evidence of the potential impact of CT1812 on autophagy, oxidative stress and the complement system, which are involved in a number of neurological disorders beyond Alzheimer’s disease,” concluded [Lisa Ricciardi](#), president and CEO of Cognition Therapeutics. “We therefore believe our pipeline candidates may have utility in the treatment of Parkinson’s disease, dementia with Lewy bodies as well as neuro-ophthalmic disorders like dry age-related macular degeneration. We have begun testing pipeline compounds in disease models with an aim to advance into one or more additional indications.”

About Cognition Therapeutics, Inc.

Cognition Therapeutics, Inc. has discovered and is developing a pipeline of novel, disease modifying, oral drug candidates to treat a broad array of neurodegenerative and neuro-ophthalmic disorders. Our pipeline compounds uniquely target the sigma-2 (σ -2) receptor, a key regulator of the cellular damage response. CT1812, our lead product candidate, is being assessed in a comprehensive clinical program for Alzheimer’s disease, including a 540-person Phase 2 study in collaboration with ACTC and supported by a competitive grant from the National Institute on Aging. Additional information about Cognition and its product candidates may be found online at www.cogrx.com.

Cautionary Statement Regarding Forward Looking Statements

This press release contains forward-looking statement, including those concerning the development and commercialization of Cognition Therapeutics’ product candidates and pipeline, their potential benefits and the Company’s expectations regarding its prospects. Forward-looking statements are subject to risks, assumptions and uncertainties that could cause actual future results to differ materially from such statements. These statements are based on information that is available as of date of this press release, and except as required by law, we undertake no obligation to update any such statements.

This press release contains references to CT1812, an investigational product. Use of CT1812 has not been approved by the FDA.